ELSEVIER

International Journal of Mass Spectrometry 203 (2000) iii–iv

International Journal of Mass Spectrometry

# CONTENTS

**Accelerated Communication**

**Charge dependence of protonated insulin decompositions**
*J. Mitchell Wells (West Lafayette, IN, USA), James L. Stephenson Jr. (Oak Ridge, TN, USA), and Scott A. McLuckey (West Lafayette, IN, USA)* ..... **A1**

**Review**

**Binding energy of van der Walls- and hydrogen-bonded clusters by threshold ionization techniques**
*J. E. Braun, Th. Mehnert, and H. J. Neusser (Garching, Germany)* ..... **1**

***Ab-initio* based model for the charge transfer mechanisms in $Ar^+ + H_2O$ collisions**
*S. Adamson, A. A. Buchachenko, A. I. Dement'ev (Moscow, Russia), R. A. Dressler (Hanscom AFB, Massachusetts), F. X. Gadea (Toulouse, France), N. F. Stepanov, and A. V. Zaitsevskii (Moscow, Russia)* ..... **19**

**Simulation-based optimization of the electrodynamic ion funnel for high sensitivity electrospray ionization mass spectrometry**
*Aleksey V. Tolmachev, Taeman Kim, Harold R. Udseth, Richard D. Smith (Richland, WA, USA), Thomas H. Bailey, and Jean H. Futrell (Newark, DE, USA)* ..... **31**

**Studying noncovalent protein complexes in aqueous solution with laser desorption mass spectrometry**
*A. Wattenberg, F. Sobott, H.-D. Barth, and B. Brutschy (Frankfurt, Germany)* ..... **49**

**Determination of the metastable dissociation pathways for chromium/oxygen cluster ions sputtered from potassium chromate and dichromate using the ion-neutral correlation method**
*M. J. Van Stipdonk, D. R. Justes, and E. A. Schweikert (College Station, TX, USA)* ..... **59**

**Now Available On**

http://ChemWeb.com
The World Wide Club for the Chemical Community
http://chemweb.com/gateways/elsevier.html

**Abstracted/Contents in:**
Chem. Abstr.; Curr. Contents, Phys. Chem. Earth Sci.; EMBASE/Excerpta Medica; INSPEC; Mass Spectrom. Bull.; PASCAL/CNRS

1387-3806(20001226)203:1/3*;1-6

*(CONTENTS CONTINUED)*

**Femtosecond laser mass spectroscopy of ferrocenes: photochemical stabilization by bridged cyclopentadienyl rings?**
*M. Clara, J. E. Braun, Th. Hellerer, and H. J. Neusser (Garching, Germany)* ..... **71**

**Determination of $^{16}O$ and $^{18}O$ abundance ratios in natural carbon dioxide reservoirs**
*A. Zyakun (Moscow Region, Russia) and M. Schidlowski (Mainz, Germany)* ..... **83**

**Cluster ions: gas-phase stabilities of $NO^+(CH_3CN)_n$ and $NO_2^+(CH_3N)_n$ with $n$ = 1–5**
*H. Wincel (Warsaw, Poland)* ..... **93**

**Behaviour of arylalkylamines toward trimethyl borate as a gas-phase reagent**
*Luis E. Ramos, Ana M. Cardoso, A. J. Ferrer Correia (Aveiro, Portugal), and Nico M. M. Nibbering (Amsterdam, the Netherlands)* ..... **101**

**Significant interferences in the post source decay spectra of ion-gated fullerene and coalesced carbon cluster ions**
*Mark P. Barrow and Thomas Drewello (Coventry, England, UK)* ..... **111**

**Gas-phase californium ion chemistry**
*John K. Gibson and Richard G. Haire (Oak Ridge, TN, USA)* ..... **127**

**Isotope ratio measurements of spent reactor uranium in environmental samples by using inductively coupled plasma mass spectrometry**
*Sergei F. Boulyga, J. Sabine Becker (Jülich, Germany), Janna L. Matusevitch (Minsk, Belarus), and Hans-Joachim Dietze (Jülich, Germany)* ..... **143**

**Kinetics of radiative/termolecular associations in the low pressure regime: reactions of bare $Au^+$ with benzene**
*Detlef Schröder (Berlin, Germany), Reuben Brown, Peter Schwerdtfeger (Auckland, New Zealand), and Helmut Schwarz (Berlin, Germany)* ..... **155**

**Gas phase reactions of $CF_3O^-$ and $CF_3O^-H_2O$ with nitric, formic, and acetic acid**
*C. Amelynck, N. Schoon, and E. Arijs (Brussels, Belgium)* ..... **165**

**Analysis of oxygen-18 in orthophosphate by electrospray ionisation mass spectrometry**
*Rebeca Alvarez, Louise A. Evans, Paul Milham, and Michael A. Wilson (New South Wales, Australia)* ..... **177**

**Secondary ion mass spectrometry for the measurement of $^{232}Th/^{230}Th$ in volcanic rocks**
*G. D. Layne and K. W. Sims (Woods Hole, MA, USA)* ..... **187**

**Erratum** ..... **199**

**Erratum** ..... **201**

**Author index** ..... **203**

**Subject index** ..... **205**

The table of contents of The International Journal of Mass Spectrometry is included in ESTOC—Elsevier Science Tables of Contents service, which can be accessed on the World Wide Web at the following URLs: http://www.elsevier.nl/locate/estoc or http://www.elsevier.com/locate/estoc

**For more information see URL IJMSP Home Page: http://www.elsevier.nl/locate/ijmsip**